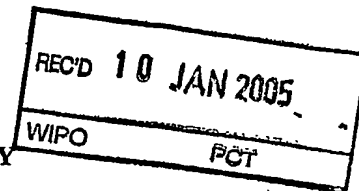


# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference <b>GILLESPT2</b>	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416																								
International application No. <b>PCT/US04/02186</b>	International filing date (day/month/year) <b>27 January 2004 (27.01.2004)</b>	Priority date (day/month/year) <b>19 March 2003 (19.03.2003)</b>																									
International Patent Classification (IPC) or national classification and IPC <b>IPC(7): F02M 19/03 and US Cl.: 261/79.1, Dig. 55</b>																											
Applicant <b>BETTER BURN, LLC.</b>																											
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>2</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of ___ sheets, as follows:</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 20%;">Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>				<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand <b>04 October 2004 (04.10.2004)</b>		Date of completion of this report <b>29 December 2004 (29.12.2004)</b>																									
Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer  Richard L. Chiesa Telephone No. (571) 272-1700																									

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/US04/02186

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished
- ☒ the description:
  - pages 1-29 as originally filed/furnished
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
  - pages 30-34 as originally filed/furnished
  - pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
  - pages 1-10 as originally filed/furnished
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/US04/02186**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims <u>1-30</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-30</u>	NO
Industrial Applicability (IA)	Claims <u>1-30</u>	YES
	Claims <u>NONE</u>	NO

**2. Citations and Explanations (Rule 70.7)**

(A) Claims 1-4, 11-16, 24, and 25 lack an inventive step under PCT Article 33(3) as being obvious over KOPA in view of WISMAN. KOPA discloses a fuel delivery system (note figures 1-5) substantially as claimed with the possible exception of a fog producing device. In any case, WISMAN teaches the use of a fog producing device in a fuel delivery apparatus for the purpose of ensuring maximum fuel-air mixing (note column 1, lines 10-71). Consequently, it would have been obvious to one having ordinary skill in the art to employ a fog producing device in the KOPA fuel delivery system in order to facilitate the intermingling of fuel and air as taught by WISMAN.

(B) Claims 5-9, 17-22, 26, and 27 lack an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the immediately preceding paragraph (A) and further in view of DOURASS. The prior art as described above discloses a fuel delivery system substantially as claimed with the apparent exception of a turbulence inducing device. However, DOURASS teaches the use of a turbulence inducing device in a fuel delivery apparatus for the purpose of maximizing fuel-air contact (note page 1, lines 81-105). It would have been obvious to one of ordinary skill in the art to employ a turbulence inducing device in the prior art fuel delivery system in order to facilitate fuel-air mixing as taught by DOURASS.

(C) Claims 10, 28-30, and 23 lack an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the preceding paragraphs (B) and (A), respectively, and further in view of GAGNON. The prior art as described above in either one of paragraphs (A) or (B) disclose a fuel delivery system substantially as claimed with the exception of a heater. GAGNON (note reference numeral 27) teaches the use of a heater in a fuel delivery apparatus for the purpose of achieving a greater mixing of fuel and air. It would have been obvious to one of ordinary skill in the art to employ a heater in either one of the prior art fuel delivery systems in order to ensure maximum fuel-air contact as taught by GAGNON.

(D) Claims 1-30 meet the the criteria set out in PCT Article 33(4), and thus have industrial applicability because the fuel delivery system claimed can be used in the energy production industry.